

**Amendments to the Claims:**

This listing of claims will replace all prior versions, and listings, of claims in the application:

**Listing of Claims:**

1. (Currently Amended) An isolated RNA comprising:  
an artificial intron comprising a gene silencing effector,  
wherein when the artificial intron RNA that is released in a cell, thereby silencing the  
function of a target gene is silenced.
2. (Currently Amended) The isolated RNA of claim 1, wherein the artificial  
intron RNA comprises ~~contains~~ a splice donor site, a splice acceptor site, a branch site,  
and a poly-pyrimidine tract.
3. (Previously Presented) The isolated RNA of claim 1, wherein the cell is a  
mammalian cell.
4. (Currently Amended) The isolated RNA of claim 2, wherein the splice  
donor site comprises ~~contains~~ 5'-AGGUAAGU-3'.
5. (Currently Amended) The isolated RNA of claim 2, wherein the splice  
acceptor site comprises ~~contains~~ 5'-CCACAGC-3'.
6. (Currently Amended) The isolated RNA of claim 2, wherein the branch  
site comprises ~~contains~~ 5'-UACUAAC-3'.

7. (Currently Amended) An isolated RNA comprising an artificial intron RNA comprising a gene-silencing effector that when is released in a eukaryotic cell, silences ~~thereby silencing~~ the function of a target gene.

8. (Currently Amended) An isolated RNA comprising an artificial intron RNA comprising a gene-silencing effector that when is released in a eukaryotic cell, silences ~~thereby silencing~~ the function of a target gene, wherein the artificial intron RNA ~~comprises~~ ~~contains~~ a splice donor site that includes 5'-AGGUAAGU-3', a splice acceptor site that includes 5'-CCACAGC-3', a branch site that includes 5'-UACUAAC-3', a poly-pyrimidine tract that includes 5'-UUCUUUUUUUC-3' (SEQ ID NO:2), or a combination thereof.

9-10. (Canceled)

11. (Original) A cultivated cell comprising the isolated RNA of claim 1.

12-18. (Canceled)

19. (Original) A composition comprising the isolated RNA of claim 1.

20-57. (Canceled)

58. (Currently Amended) The isolated RNA of claim 1, wherein the artificial intron ~~comprises~~ ~~contains~~ a sequence that targets an exon of the target gene, wherein the target gene is integrin  $\beta$ 1.

59. (Currently Amended) The isolated RNA of claim 7, wherein the artificial intron comprises ~~contains~~ a sequence that targets an exon of the target gene, wherein the target gene is integrin  $\beta$ 1.

60. (Currently Amended) The isolated RNA of claim 8, wherein the artificial intron comprises ~~contains~~ a sequence that targets an exon of the target gene, wherein the target gene is integrin  $\beta$ 1.